

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A powder comprising silica-coated zinc oxide fine particles in which the surface of each particle is coated with silica, wherein large particles of 5 μm or more account for 0.1 mass% or less and this amount is obtained by a dry-format classification classifier.

2. (previously presented): A powder comprising surface-hydrophobicized silica-coated zinc oxide fine particles in which the silica-coated zinc oxide fine particles whose surfaces have been coated with silica are further treated with a hydrophobicity-imparting agent, wherein large particles of 5 μm or more account for 0.1 mass% or less and this amount is obtained by a dry-format classification classifier.

3. (original): The powder as claimed in claim 2, wherein the hydrophobicity-imparting agent is one or more members selected from the group consisting of silicone oils, alkoxysilanes, silane coupling agents, and higher fatty acid salts.

4. (original): The powder as claimed in any of claims 1 through 3, wherein the silica-coated zinc oxide fine particles have silica coating of 0.5 to 100 nm in thickness.

5. (previously presented): The powder as claimed in claim 1 or 2, wherein the silica-coated zinc oxide fine particles have an average primary particle size of 1 to 200 nm.

6. (previously presented): The powder as claimed in claim 2, wherein the surface-hydrophobicized, silica-coated zinc oxide fine particles have an average primary particle size of 5 to 120 nm and a silica-film thickness of 0.5 to 25 nm.

7. (previously presented): The powder as claimed in claim 1 or 2, wherein the ratio I of infrared absorption peak intensity of silica film of the silica-coated zinc oxide fine particles at 1150 to 1250 cm^{-1} to that at 1000 to 1100 cm^{-1} as determined on an infrared absorption spectrum is 0.2 or more ($I=I_1/I_2$; wherein I_1 denotes absorption peak intensity at 1150 to 1250 cm^{-1} and I_2 denotes absorption peak intensity at 1000 to 1100 cm^{-1}), and the silica film has a refractive index of 1.435 or more.

8. (previously presented): The powder as claimed in claim 1 or 2, wherein the powder exhibits a photocatalytic activity of 60 Pa/min or less as measured through the tetralin auto-oxidation method.

9. (previously presented): The powder as claimed in claim 1 or 2, wherein the powder exhibits a dye color fading rate ($\Delta\text{ABS}_{490}/\text{hour}$) of 0.1 or less as measured through the sunset yellow method.

10. (previously presented): The powder as claimed in claim 1 or 2, wherein the powder exhibits an organic UV absorber decomposition rate ($\Delta\text{ABS}_{340}/\text{hour}$) of 0.01 or less as measured through the Parasol method.

11. (previously presented): The powder as claimed in claim 1 or 2, wherein the powder exhibits a percent organic UV absorber decomposition of 5% or less as measured through the ethylhexyl p-methoxycinnamate method.

12. (previously presented): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 1 or 2, which contains titanium oxide.

13. (original): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 12, wherein titanium oxide in an amount of 2 parts by mass to 5 parts by mass is further contained based on zinc oxide of 10 parts by mass.

14. (previously presented): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 12, wherein at least one part of titanium oxide is coated with silica.

15. (previously presented): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 12, wherein the titanium oxide contains a mixed crystal having a titanium-oxygen-silicon bond in its primary particles.

16. (original): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 15, wherein when the BET specific surface area of titanium oxide is represented by “A m²/g” and the SiO₂ content is represented by “B mass%”, the ratio of B/A is from 0.02 to 0.5.

17. (previously presented): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 15, wherein BET specific surface area of the titanium oxide is from 10 to 200 m²/g.

18. (previously presented): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 15, wherein the average primary particle size of titanium oxide is 0.008 μm to 0.15 μm.

19. (previously presented): The powder comprising silica-coated zinc oxide fine particles as claimed in claim 15, wherein the titanium oxide has core (a nucleus)/shell (a husk) structure, wherein the core is TiO₂-rich structure and the shell is SiO₂-rich structure.

20. (previously presented): An organic polymer composition containing a powder comprising silica-coated zinc oxide fine particles as claimed in claim 1 or 2, and a thermoplastic resin.

21. (previously presented): An organic polymer composition consisting essentially of a powder comprising silica-coated zinc oxide fine particles as claimed in claim 1 or 2, and a thermoplastic resin.

22. (previously presented): The organic polymer composition as claimed in claim 20, wherein the thermoplastic resin is selected from the group consisting of polyethylenes, polypropylenes, polystyrenes, polyamides, polyesters, and polycarbonates.

23. (previously presented): A shape-imparted product of an organic polymer composition as claimed in claim 20.

24. (original): The shape-imparted product as claimed in claim 23, which is selected from the group consisting of fibers, yarns, films, tapes, hollow products, and multi-layer structures.

25. (previously presented): An object comprising a shape-imparted product as claimed in claim 23 and selected from the group consisting of building materials for interior furnishings and exterior finish, machinery, exterior and interior décor materials for automobiles, glass products, electric appliances, agricultural materials, electronic apparatus, tools, tableware, bath products, toiletry products, furniture, clothing, woven fabrics, non-woven fabrics, cloth products, leather products, paper products, sporting goods, futon, containers, eyeglasses, signboards, piping, wiring, brackets, sanitary materials, automobile parts, outdoor goods such as tents, panty hose, socks, gloves, and masks.

26. (previously presented): The cosmetic material comprising the powder comprising silica-coated zinc oxide fine particles as claimed in claim 1 or 2.

27. (withdrawn): A process for producing silica-coated zinc oxide fine particles according to claim 1, comprising the steps of:

bringing a composition for forming silica coating into contact with raw material zinc oxide particles whose primary particles have an average particle size of 5 nm to 200 nm, wherein the composition for forming silica coating contains at least the following compositions:

1) silicic acid containing neither an organic group nor a halogen, or a precursor capable of producing such silicic acid,

2) water,

3) an alkali, and

4) an organic solvent,

whereby surfaces of the zinc oxide particles are selectively coated with a silica coating, and

subjecting the obtained silica-coated zinc oxide particles to a dry-format classification to reduce the number of large particles.

28. (withdrawn): The process according to claim 27, wherein said composition for forming silica coating has a water/organic solvent ratio by volume of 0.1 to 10 and a silicon content of 0.001 to 5 mol/L.

29. (withdrawn): A process for producing surface-hydrophobicized silica-coated zinc oxide fine particles according to claim 2, comprising the steps of:

bringing a composition for forming silica coating into contact with raw material zinc oxide particles whose primary particles have an average particle size of 5 nm to 200 nm, wherein the composition for forming silica coating contains at least the following compositions:

1) silicic acid containing neither an organic group nor a halogen, or a precursor capable of producing such silicic acid,

2) water,

3) an alkali, and

4) an organic solvent,

whereby surfaces of the zinc oxide particles are selectively coated with a silica coating,

subjecting the produced silica-coated zinc oxide particles to surface treatment with a hydrophobicity-imparting agent to obtain surface-hydrophobicized silica-coated zinc oxide particles, and

subjecting the obtained surface-hydrophobicized silica-coated zinc oxide particles to a dry-format classification to reduce the number of large particles.

30. (withdrawn): The process according to claim 29, wherein said composition for forming silica coating has a water/organic solvent ratio by volume of 0.1 to 10 and a silicon content of 0.001 to 5 mol/L.